

## Sentra with G-Series Control Instrument

# REFERENCE GUIDE

## INSTALLATION • OPERATION • TROUBLESHOOTING



This reference guide covers standard Advantage temperature control units with the G-Series Control Instrument. This guide may be used for customized units using the G-Series Control Instrument even when the unit may not be physically the same as the units depicted in the included photos.



### BEFORE INSTALLING OR OPERATING

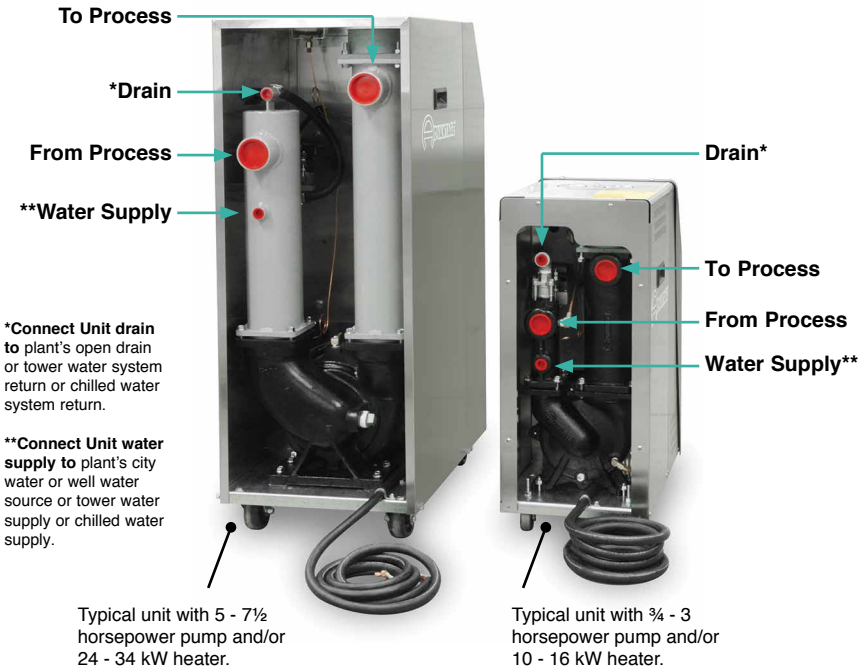
1. The fluid used in your temperature control unit will greatly effect its short and long-term operation. Lack of as well as improper water treatment can damage the temperature control unit by causing scale build-up, excessive corrosion and/or bacterial contamination. It is the equipment owner's responsibility to prevent damage caused by poor water quality. The services of a water treatment professional is recommended.
2. Before installing and operating the unit, be aware of and follow any local laws and codes that apply to the installation.
3. When contacting the Advantage Service Department always have the unit Model and Serial number from the data tag located on the side of the unit.



**SERVICE DEPARTMENT: 317-887-0729**

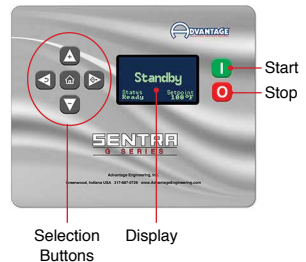
# INSTALLATION

- 1. Process:** Care should be taken to use materials (hose, rigid piping, valves or filters) rated for the temperature and pressure duty of your unit. Most units have a maximum operating temperature of 300°F or less and a maximum pressure of 150 PSI. The unit is most efficient when full size plumbing is run from the unit connections to and from the process. If necessary, reduce the plumbing size at your process, not at the unit.
- 2. Electrical:** Be certain all electrical connections are tight in the unit. Install unit power cord (when supplied) to power disconnect switch. Applied power must be equal to the unit voltage and amps listed on the unit data tag. Follow all applicable local and national electrical codes.



# START UNIT

- 1. Fill unit with water.**
- 2. Apply power.** The Standby screen will illuminate. When Standby is displayed on the screen, the unit is not running.
- 3. This unit features an LCD screen.** Use the five soft touch buttons to navigate the available screens and select parameters.

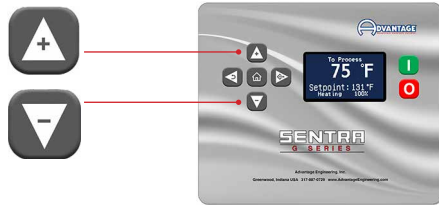


- A System Safety Fault may prevent startup. Probe, cooling valve, water supply pressure, pump overload or high temperature limit may display once power is applied and must be corrected prior to operation.

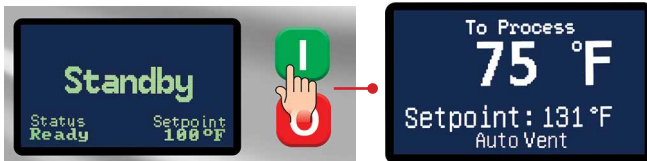


Sample of Fault display screens. Not all Fault screens are shown here. Check manual for more information.

- Adjust the setpoint to the desired value by pressing the Up or Down button.



- The unit is ready to start when no errors are shown on the screen. Press the green start button. The unit will auto vent if the fluid temperature is below 100°F or as setup in the features menu.

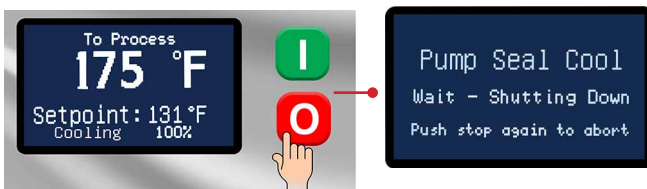


- The unit will heat or cool to maintain the setpoint temperature.



## ***STOP UNIT***

- Decrease the setpoint temperature lower than 85°F and allow the unit to cool to the temperature. A pump seal cooling feature can be selected from the features menu to automatically cool the unit once the stop button is pressed.



2. Press the stop button.
3. Relieve residual static pressure before disconnecting or servicing the unit.
4. Follow all lock-out tag-out requirements.

## **TROUBLESHOOTING**

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This is a general overview of unit troubleshooting. Refer the Operations manual for complete troubleshooting.

### **Unit Will Not Start (Display Blank & Off)**

1. Fuse open at main power disconnect switch.
2. Transformer fuse open

### **Unit Will Not Start (Display On)**

1. Error or alert indicator displayed.
2. Follow instructions on screen to troubleshoot and refer to manual or contact the Advantage service department.

### **Unit Overheats**

1. Low water supply pressure.
2. AVT cooling valve defective.
3. Drain line obstructed.
4. Instrument defective.
5. Cooling requirement exceeds AVT valve cooling capacity.

### **Unit Underheats**

1. Process water leakage - defective AVT cooling valve.
2. Heater element failure.
3. Process heating requirement exceeds unit heating capability.
4. Control instrument defective and not calling for heat.

### **Pressure Relief Valve Leaks**

1. Water supply pressure too high. See manual.
2. Pressure relief valve contamination.

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The companion CD contains a complete service manual suitable for viewing in Acrobat Reader and printing on your local printer. If you have any questions regarding this Reference Guide, the Service Manual, the installation, operation or servicing of the unit, please call the Advantage Service Department.



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